

Draft Area-Wide Soil Contamination Project Task Force Work Plan

Background

Soil in large areas of Washington State is contaminated with low-to-moderate levels of arsenic and lead. This contamination has been caused by a variety of historical activities including past releases from industrial operations and historical application of certain kinds of agricultural pesticides. As Washington's population has grown, many of these areas have been developed into residential neighborhoods, schools, and parks. These development activities, which continue today, have created pressures for cleanup and have raised a variety of health, environmental, and marketplace concerns. Widespread low-to-moderate levels of soil contamination present special challenges with respect to human health protection, land use conversion, financial impacts, and citizen awareness. Current efforts to address these problems are hampered by:

- Gaps in understanding of the size and location of soil contamination problems;
- Failure to fully integrate (on a widespread basis) measures to cleanup soil contamination with local land-use planning and other community-development activities;
- Limited public awareness of the problem and steps that can be taken to minimize exposure; and,
- Insufficient financial resources to address this problem.

To address these issues, the Departments of Agriculture, Ecology, and Health and the Office of Community Development (collectively, "the agencies") have chartered the Area-Wide Soil Contamination Task Force (Task Force). The Task Force will examine issues and concerns raised by area-wide soil contamination and, by June 2003, develop findings and recommendations to respond to the problem. In addition to support by the chartering agencies, the Project will be supported by a contractor team that will carry out research and produce issue papers, reports, analyses, and other documents and materials for the Task Force to review. The Task Force will also be supported by two workgroups: the first focused on the nature and extent of area-wide soil contamination and the second focused on protective measures.

This work plan establishes the process and schedule by which the Task Force will produce findings and recommendations.

Task Force Objectives

As discussed in the Task Force charter, the Task Force will advise the agencies on a statewide strategy for addressing area-wide, low-to-moderate level soil contamination by arsenic and lead. Specifically, the Task Force is asked to issue findings and recommendations on the following questions:

- What is currently known about the nature and extent of arsenic and lead soil contamination in Washington State? What steps should be taken to improve our understanding of the location and magnitude of arsenic and lead soil contamination?
- What are technically feasible measures for addressing widespread low-to-moderate level soil contamination problems? What is the full range of actions that might be considered to address widespread low-to-moderate levels of soil contamination?
- What changes are needed to eliminate barriers to addressing area-wide soil contamination problems? How can agencies facilitate cleanup of area-wide soil contamination problems under the current legal system?
- What agencies need to play a role in addressing area-wide soil contamination problems, and what are possible funding sources?

Key Issues and Concerns

Prior to the first Task Force meeting, the contractor team conducted individual telephone interviews with Task Force members. During these interviews there was broad convergence around a number of key issues and concerns related to area-wide soil contamination, including:

- Economic impacts – depressed property values, adverse effects on tourism and economic development, sustainability of agricultural market, and implications for homeowners
- Public health impacts – whether there are risks to sensitive populations, especially children, and risks that, at present, may not be adequately managed or fully understood
- Undue public alarm/outcry – concerning health risks and agriculture in particular
- Implementation of recommendations – what really will happen with the recommendations, especially in terms of public education
- Technical and process challenges – characterizing the problem and risks, communication, finding practical solutions, constraints of the Model Toxics Control Act (MTCA) and cleanup standards
- Funding – whether solutions will be fundable

There was also broad agreement among Task Force members around goals for the Project outcomes. Many Task Force members expressed the desire for consensus findings and recommendations, especially around practical, reasonable solutions to the area-wide soil contamination problem. Task Force members said they wanted to match solutions to the problems, balance economic concerns, and that the recommendations might consist of a range or matrix of options. Finally, Task Force members want the Project to result in findings and recommendations that apply statewide but can be adapted by local communities.

Process and Approach

The Task Force will use a three-phase process to meet the objectives established in the Task Force charter and to address its key issues and concerns. First, the Task Force will develop an understanding of the scope and context of the area-wide soil contamination problem and identify

and describe a wide range of potential solutions. Second, the Task Force will narrow the range of potential solutions to those that might be practical for Washington State and analyze the implications associated with each alternative. Third, the Task Force will assemble findings and recommendations. Each phase of the process is discussed below.

Phase One – Information Gathering and Identification of Alternatives

During the initial phase of the project, work will be focused on joint learning and information gathering around topics relevant to the area-wide soil contamination problem. This will be organized around characterizing the nature and extent of the area-wide soil contamination problem and on identifying a range of protective measures and institutional frameworks that might be used address area-wide soil contamination. During this time, the chartering agencies, contractor team, and workgroups will produce a series of issue papers, reports, analyses, and other documents and materials to support and inform Task Force deliberations. These include:

- A broad-based series of informational interviews with people in research and academia, government agencies, and non-governmental stakeholder groups who have worked on arsenic and/or lead contamination issues, and in particular, on area-wide soil contamination problems and a related review of relevant literature (for discussion at April meeting);
- Development of preliminary estimates, based on existing information, of the nature and extent of the area-wide soil contamination problem in Washington State (for discussion at May and June meetings);
- Development of guidance on characterizing area-wide soil contamination problems for local governments and for land developers and property owners (for discussion at September meeting);
- Identification of categories of sites for which model remedies might be developed and identification of potential model remedies and other protective measures (for discussion at May and June meetings);
- Analysis of the extent to which potential model remedies and other protective measures protect human health and the environment, comply with MTCA cleanup standards, and represent permanent solutions (for discussion at May, June, and July meetings);
- Analysis of the cost of potential model remedies and other protective measures (for discussion at May, June, and July meetings);
- Identification of a range of institutional approaches / processes that are currently being used or that could be used to address area-wide soil contamination problems, including detailed case studies on three to five approaches (for discussion at May and June meetings); and
- Analysis of the institutional, legal, and funding implications and issues associated with implementation of potential institutional approaches (for discussion at June, July, and September meetings).

These issue papers, reports, analyses, and other documents and materials were first identified as part of the scope of work for the contract support team based on the Agencies' views about the types of information that would be necessary to meet Project objectives. (The scope of work of the support team contract is attached.) They are intended as a starting point; the Task Force

will be asked to influence both the scope and direction of the information gathering and analysis to ensure it meets its needs.

To ensure that the Task Force has ample opportunity to influence the scope and direction of the information gathering and analysis that is carried out in support their deliberations, the detailed schedule outlined later in this document includes a number of opportunities for the Task Force to discuss each of the major issue papers, analyses, and other deliverables described in the contractor support contract. First, the objectives of each of the Project areas (nature and extent of contamination, protective measures, and institutional frameworks) and the major documents of the support contract were reviewed at the first Task Force meeting. Second, the Task Force will have the opportunity to “preview” the major documents. The purpose of the “preview” is for the Agencies, workgroups, and contractor team to present their current thinking about the scope, content, and format of a document during its early phases, so the Task Force can provide early feedback and direction. After the “preview,” the Task Force will be updated on major documents as they are developed. Third and finally, when documents are complete or near complete, they will be presented to the Task Force for review and discussion.

In addition to work associated with production of issue papers, reports, and other documents and materials, a series of general topics will be covered at Task Force meetings to place the area-wide soil contamination problem in context and to facilitate joint learning. These general topics will include:

- Health effects associated with arsenic and lead and exposure pathways and issues,
- Arsenic and lead cleanup levels in Washington and other states,
- Current approaches and existing frameworks (e.g., the Model Toxics Control Act, the Growth Management Act) that might play a role in addressing low-to-moderate arsenic and lead contamination,
- Distribution and fate and transport of naturally occurring arsenic and lead, and
- Other topics identified by the Task Force.

The pace of this portion of the project will be intense, with full-day Task Force meetings anticipated in February, April, May, June, July, and September 2002.

Phases Two and Three – Implications of Alternatives and Findings and Recommendations

Beginning in the summer and fall of 2002, the Task Force will move into a more evaluative phase, where it will select sets of potential protective measures and institutional approaches that might be used to address the area-wide soil contamination problem, and consider the implications of these potential approaches for Washington State.

The Task Force might begin this process by considering the information gathered during phase I of the Project in light of key questions such as:

- What is the size of the area-wide soil contamination problem in Washington State?

- How is the problem currently addressed with respect to: identification, management (including cleanup), finance, and other factors?
- Which elements of the current approaches to the problem are working well? Which need improvement? Where are the gaps in current efforts to address the problem? How might those gaps be filled?
- Are there more effective, efficient, or fair methods to address the area-wide soil contamination problem?

Using these, or similar questions, the Task Force will begin to develop its findings and recommendations. Currently, it is anticipated that Task Force findings and recommendations will address the four objectives as specifically as possible. To do this, the Task Force might make findings and recommendations in a number of specific areas such as:

- What is currently known and what is not known about the nature and extent of arsenic and lead soil contamination and what steps should be taken to improve understanding of the nature and extent of the problem?
- What measures should be used to address area-wide soil contamination with respect to information distribution and education, exposure control, cleanup, and other approaches?
- What structure is needed to implement measure to address area-wide soil contamination with respect to legal and regulatory frameworks, information systems, organizations, agencies and/or other institutions, and other structural elements? To what extent do existing structures meet these needs? How should gaps be addressed?
- How should responses to the area-wide soil contamination problem be financed? How should agencies and/or institutions involved in addressing area-wide soil contamination be funded?

The Task Force will work to examine implications of potential protective measures and institutional frameworks and to develop findings and recommendations in the fall and winter of 2002, culminating in the development of a draft Task Force report by approximately February 2003. Public outreach on the draft Task Force report is anticipated during March and April 2003, with a final report submitted to the charting agencies in June 2003. It is anticipated that the contractor support team will draft the major sections of the Task Force report based on Task Force instructions and submit drafts to the Task Force for review.

Detailed Schedule

The Task Force will meet ten to twelve times between February 2002 and June 2003. The following detailed schedule outlines the planned meeting dates and preliminary meeting topics for January 2002 through November 2002. As the Project unfolds, this schedule will be updated to reflect meeting plans for November 2002 through June 2003. Exact meeting agendas will evolve in response to Task Force concerns and direction and will be distributed at least one week before each Task Force meeting.

As discussed earlier in this document, much of the information gathering, research, and analysis that will inform Task Force deliberations will be carried out by the Agencies and by the contractor team in support of the Task Force. Particularly during the first phase of the project,

Task Force meetings are largely organized around influencing the scope and direction of this research and analysis and on understanding the results and implications of this research and analysis. When presentations are called for, it is anticipated that they will be made by the Agencies, members of the workgroups, or staff from the contractor team. As the project moves into the second phase, the focus will transition to the Task Force (supported by the Agencies and the contractor team) evaluating and deliberating on the combinations of approaches that are most appropriate for Washington State and the implementability of various approaches. Finally, the focus will shift towards the Task Force making decisions about findings and recommendations.

Meeting 1 – February 7, 2002 (Bellevue) (complete)

Meeting 2 – April 1 (Wenatchee) (8 weeks since previous meeting)

- **Task Force work plan**
- **Project communication principles**
- **Joint learning:** health effects of arsenic and lead, exposure pathway and concerns, natural distribution of arsenic and lead, and development of arsenic and lead cleanup standards in Washington and other states.
- Present/discuss preliminary results of the **information survey**.
- **Nature and Extent**
 - **Yakima County Pilot Project.** Update on ongoing activities, including responses to sampling access request letters. The Pilot Project is designed to evaluate the adequacy and accuracy of using GIS mapping of former orchard lands to estimate lead arsenate use patterns and to evaluate the variability of lead and arsenic concentrations in soils throughout Yakima County. As currently envisioned, the confirmational sampling portion of the pilot project will involve sampling of 80 to 90 properties in the county. Letters are scheduled to be mailed in late March.
 - **Preliminary estimates.** Preview planned report on using existing data sources to develop preliminary estimates of the nature and distribution of arsenic and lead in Washington State, discuss preliminary findings, and obtain Task Force feedback on approach to developing preliminary estimates, data sources being used, and on the scope and level of detail currently planned for the preliminary estimates report. The results of the preliminary estimates analysis will be presented and discussed at the May Task Force meeting.
- **Protective measures**
 - Identification of **categories of sites and range of protective measures.** Preview planned approach to identifying categories of sites for which protective measures and/or model remedies might be needed and obtain Task Force feedback. Also preview the range of protective measures that are available for further analysis and obtain Task Force feedback. Categories of sites and protective measures selected for further analysis will be presented and discussed at the May Task Force meeting.
 - **Analysis of protective measures.** Preview planned analysis of protective measures/model remedies and obtain Task Force feedback. Current plans call for each protective measure/model remedy to be analyzed by the contractor team for cost, compliance with cleanup standards and other requirements, human health and environmental implications, and permanence. Analysis is scheduled to be carried out in May, June, July, and August. Each individual analysis paper will also be discussed with the Task Force as it is developed; however, many analyses will begin in April and be substantively underway before the May Task Force meeting, so early input is critical.
- **Institutional frameworks**

- **Selection of case studies.** Preview planned approach to identifying institutional frameworks case studies, content of case studies, and case study candidates, and obtain Task Force input into the types of sites that should be addressed in case studies, the planned elements, and level of detail in case studies. This input is important to inform selection of case study sites, which is scheduled to occur before the May Task Force meeting. The case studies are a key element of the identification and analysis of institutional features and approaches that might be brought to bear on area-wide soil contamination.

Meeting 3 – May 9 (Bellevue) (5 weeks since previous meeting)

- **Project public involvement plan.** Present draft Project public involvement plan and obtain Task Force feedback on objectives, approach, activities, and timelines. Revised plan will be discussed at the June Task Force meeting.
- **Joint learning:** Health effects of arsenic and lead, natural distribution of arsenic and lead, and development of arsenic and lead cleanup standards in Washington and other states, continued. Update on final results of the information survey.
- **Nature and Extent**
 - Update on **Yakima County Pilot Project** including ongoing sampling activities.
 - Update on development of **preliminary estimates** of nature and extent of contamination, present and discuss findings (i.e., estimates), summarize technical issues under discussion in Workgroup I, and obtain Task Force feedback on what preliminary estimates seem to imply for ongoing analysis of protective measures and institutional alternatives.
- **Protective measures**
 - Present/discuss **categories of sites** and **protective measures alternatives** identified for further analysis and obtain Task Force feedback.
 - Update on **cost analysis issue paper** – summarize ongoing analysis and obtain Task Force feedback.
 - Update on **human health analysis issue paper** – summarize ongoing analysis and obtain Task Force feedback.
- **Institutional frameworks**
 - Update on **Case studies** – present and discuss ongoing case studies and obtain Task Force feedback on additional analysis/studies that may be needed.
 - **Identification of institutional alternatives.** Preview range of institutional alternatives that might be considered for further analysis and planned analysis and obtain Task Force feedback. Based on the information survey, case studies, and Task Force input, a range of institutional alternatives will be identified for further analysis with respect to legal, funding, and other implementation issues. Institutional alternatives already identified include: the MTCA cleanup process, local permitting/planning processes, and oversight by financial institutions. This is an opportunity for the Task Force to give early feedback and direction on this approach and on the range and types of institutional alternatives to be considered for further analysis.

Meeting 4 – June 12 (Yakima) (6 weeks since previous meeting)

- Update on **Project public involvement plan** – present/discuss revised plan.
- **Joint learning:** the Model Toxics Control Act and what it offers to the area-wide soil contamination problem, including model remedy provisions
- **Nature and Extent**
 - **Yakima County Pilot Project.** Present and discuss preliminary sampling results, preview approach for developing pilot project report and obtain Task Force feedback. The draft pilot project report is scheduled to be finished in September.

- **Preliminary estimates.** Present/discuss preliminary estimates report and issues associated with the estimates (including uncertainties) and discuss how estimates and supporting information might be used to support/inform additional project activities. (Preliminary estimates report will be distributed prior to the Task Force meeting.)
- **Protective measures**
 - Present/discuss **cost analysis and human health analysis issue papers** and obtain Task Force feedback on areas/issues that may require additional work or clarification. (Issue papers will be distributed prior to the Task Force meeting.)
 - Preview **permanent solutions issue paper** and obtain Task Force feedback on nature and scope of planned analysis. This analysis is planned to evaluate the extent to which protective measures/model remedies under consideration are “permanent to the maximum extent practicable” as discussed in MTCA. The draft analysis will be complete in July.
- **Institutional frameworks**
 - Present/discuss **case study report** and obtain Task Force feedback on areas for further evaluation, key points, and implications. (Report will be distributed prior to the Task Force meeting.)
 - Update on **range of alternatives for analysis** – review range of alternatives under consideration and obtain Task Force feedback on whether information survey, case studies, or other information implies changes to the range. This discussion will support development of the identification of institutional alternatives report, which is scheduled to be drafted in June and discussed at the July Task Force meeting.

Meeting 5 – July 25 (Bellevue?) (5 weeks since previous meeting)

- **Joint learning:** the Growth Management Act and other land-use planning laws and what they offer to the area-wide soil contamination problem.
- **Nature and extent**
 - Update on **Yakima County Pilot Project** and development of pilot project report.
 - **Local government sampling guidance.** Preview guidance/resource document for local government on identifying and characterizing area-wide soil contamination problems and obtain Task Force feedback on planned scope and focus of the document. As currently planned, document will be focused on methods and tools to evaluate local government jurisdictions (e.g., counties, towns). Draft document is scheduled to be complete in September.
 - **Land developers/property owners sampling guidance.** Preview guidance document for land developers and property owners that will address how they might determine whether soils at individual properties contain elevated levels of arsenic and lead and obtain Task Force feedback on planned scope and focus of the document. As currently planned, document will be focused on evaluations of individual properties. Draft document is scheduled to be complete in February.
- **Protective measures**
 - Present/discuss **permanent solutions issue paper** and obtain Task Force feedback on areas/issues that may require additional work or clarification. (Issue paper will be distributed prior to the Task Force meeting.)
 - Preview **model remedy report** and obtain Task Force feedback on planned scope and direction of the report and on the protective measures/model remedies that seem the most promising. The model remedy report is planned to synthesis the analysis of protective measures/model remedies into a single document that describes each protective measure/model remedy and discusses the advantages, disadvantages and implementability of each option. The draft report is scheduled to be complete in August and discussed at the September Task Force meeting.

- **Institutional frameworks**
 - Present/discuss **identification of institutional alternatives report** and obtain Task Force feedback on final set of alternatives that will move forward for further analysis. (Report will be distributed prior to the Task Force meeting.)
 - Preview **analysis of individual institutional alternatives** and obtain Task Force feedback on planned analysis and on issues/concerns that warrant particular attention. Analysis is planned in three areas: funding, legal issues, and roles/responsibilities related to implementability. Analysis is scheduled to be carried out in August and September and discussed at the September and November Task Force meetings.

Meeting 6 – late September date to be determined (Eastside location)

- **Joint learning:** topic to be determined
- **Nature and extent**
 - Update on **Yakima County Pilot Project** and development of pilot project report. Draft report is scheduled to be complete in late September.
 - Update on development of **sampling guidance documents**.
 - **Regional variations in natural background.** This analysis will evaluate any regional variations in the natural background concentrations of arsenic and lead, building on the background study done by the US Geological Survey and Ecology in the mid-1990s. Preview planned evaluation and obtain Task Force feedback. Evaluation is scheduled to be complete in late October.
- **Protective measures**
 - Present/discuss **protective measures/model remedy report**, consider implications of the report findings for development of Task Force findings and recommendations, and identify any areas where further clarification or additional information or analysis might be needed to support Task Force deliberations. (Report will be provided in advance of the Task Force meeting.)
- **Institutional frameworks**
 - Update on ongoing **analysis of institutional alternatives** – discuss ongoing analysis, including any preliminary findings and obtain Task Force feedback. Analysis is scheduled to be complete in early October.
- **Developing findings and recommendations.** Consider progress to date and discuss process and for developing findings and recommendations.

Meeting 7 – early November date to be determined (Westside location)

- **Joint learning:** topic to be determined
- **Nature and extent**
 - Present/discuss **Yakima County Pilot Project** report, consider implications of report for development of Task Force findings and recommendations, and identify any areas where further clarification or additional information or analysis might be needed to support Task Force deliberations. (Report will be provided in advance of Task Force meeting.)
- **Protective measures**
 - Update on any ongoing analysis, as necessary.
- **Institutional frameworks**
 - Present/discuss **institutional alternatives analysis report**, consider implications the report for development of Task Force findings and recommendations, and identify any areas where further clarification or additional information or analysis might be needed to support Task Force deliberations. (Report will be provided in advance of Task Force meeting.)

- **Developing findings and recommendations.** Consider focusing questions, such as: how does the Task Force define “the problem” in light of the information and analysis completed to date? What does this imply for the content and direction of findings and recommendations? Plan remaining process to develop findings and recommendations report and outline main features of the report.